## HiTek D Power



## SERIES G CUSTOM BUILT GUN POWER SUPPLIES

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## SERIES G CUSTOM BUILT GUN POWER SUPPLIES









HiTek Power's Series G consists of an extensive range of custom-built gun power supplies designed to meet the demanding and specific requirements needed in electron-beam lithography, semiconductor inspection/repair, scanning electron microscopes, transmission microscopy, ion beam etching, focused ion beam lithography and nanotechnology applications.

The Series G power supplies have been specifically designed for use in FEG, FIB, Tetrode, Triode, single beam and multi-beam SEM applications using either tungsten or LaB6 tips.

HiTek Power has incorporated its proven high voltage design techniques and power conversion technologies to ensure very high stability, excellent production repeatability and high reliability.

Application knowledge is essential in designing and supplying SEM products -HiTek Power has substantial knowledge in this area to help our customers with the selection and implementation of suitable power solutions. Typical types of outputs and applications with which we have gained vast experience are outlined below:

Accelerator **Beam Blanking** Cap **Charge Regulator** Condenser Detector Deflection Dynamic Correction ExB Extractor Filter Floating Flood Gun Grid Focus Heater Lens Magnetic Photomultiplier Multi-Beam Proxy Quad Scintillator Suppressor Wafer Bias Wehnelt Wobbler

HiTek Power's Series G power supplies can be customised to meet many demanding applications and can include a large variety of different options. HiTek Power's technology modules include:

- Active temperature compensation to achieve a temperature coefficient of 2ppm/ °C maximum over the operating temperature range.
- Ripple levels as low as 500µV or 1ppm of the maximum output voltage level.
- Unipolar and bipolar output voltages from 200V to 60kV, outputs can be fixed, controllable, grounded, floating or multiple stacked floating outputs.
- Any number of outputs can be supplied from 1 to architectures currently with 415 outputs controlled from a single interface.
- Digital interfaces using RS232, CAN or Ethernet can be supplied with hard wired or fibre optic isolated versions. Generally the protocol used will be defined to ensure compatibility with the rest of the customer system.
- Beam blanking technology with the ability for switching transitions within 50nS, this technology can be supplied as a separate column mounted module that is directly controlled or controlled through a Gun Power Supply.

Please contact our Sales Department to find out how we can help you.

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